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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/706,517	11/03/2000	Michael J. O'Phelan	279.235US1	6527

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EXAMINER

HA, NGUYEN T

ART UNIT	PAPER NUMBER
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2831

DATE MAILED: 04/23/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/706,517

Applicant(s)

O'PHELAN, MICHAEL J.

Examiner

Nguyen T Ha

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on 03 November 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☐ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) 12-15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 and 16-39 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTC-1449) Paper No(s) 4, 5 & 6 6) ☐ Other \_\_\_\_\_

## DETAILED ACTION

### *Election/Restrictions*

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. Claims 1-11 and 36-39, drawn to capacitor construction, classified in class 361, subclass 512.

II. Claims 12-15, drawn to an electric heart stimulator assembly, classified in class 607, subclass 4 thru 38.

The inventions are distinct, each from the other because of the following reasons:

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

2. During a telephone conversation with Peter C. Maki on 5/14/2002 a provisional election was made with traverse to prosecute the invention of group I, claims 1-11 and 16-39. Affirmation of this election must be made by applicant in replying to this Office action. Claims 12-15<sup>are</sup> withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

DR 4/18/03

### *Information Disclosure Statement*

3. Acknowledgement is made of applicant's Information Disclosure Statements (PTO-1449), which were received by the Office on June 25, 2001, March 19, 2001, and on January 13, 2003. These documents have been made of record in the file as Paper Nos. 4, 5 and 6, respectively.

*Claim Rejections - 35 USC § 102*

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

5. The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

6. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Fishler (5,930,109).

Regarding claim 1, Fisher discloses a capacitor (figures 1-6) comprising:

- an aluminum case (14);
- a capacitor stack (10) mounted within the aluminum case, the capacitor stack comprising one or more anodes (32a) and one or more cathodes (30), one of the one or more anodes and one or more anodes attached to the aluminum case (figure 2);

Regarding claim 2, Fisher discloses the case is etched and being adapted to be an active cathodic element servicing one or more anodes of the capacitor stack which are adjacent the case (figure 3).

Regarding claim 3, Fisher discloses the case is adapted to be an active anodic element (figure 3).

7. Claims 4-11 and 16-39 are rejected under 35 U.S.C. 102(e) as being anticipated by Nielsen et al (6,477,037).

Regarding claim 4, Nielsen et al disclose a capacitor comprising:

- an aluminum case (90) having an etched inner surface;
- a capacitor stack (265) disposed within the case, the capacitor stack including a plurality of cathode stacks (175) and a plurality of anode stacks (185), the cathode stacks electrically coupled with the etched inner surface; and
- the plurality of anode stacks (185) including a first anode stack disposed adjacent to the etched inner surface (figure 5a), the first anode stack having a major surface facing the etched inner surface of the case and having an electrolyte saturated separator (180) disposed between the etched inner surface and the major surface to facilitate charge storage between the etched inner surface and the major surface (figure 5a).

Regarding claim 5, Nielsen et al disclose plurality of anode stacks (185) include a second anode stack disposed adjacent to a lower inner surface, the second anode stack having a second major surface

the second major surface facing the lower inner surface of the case (figure 6a).

Regarding claim 6, Nielsen et al disclose the plurality of anode stacks comprise etched anode stacks (column 14 lines 37-42).

Regarding claim 7, it is inherent that the aluminum electrolyte capacitor taught by Nielsen et al comprises at least 98% aluminum.

Regarding claim 8, Nielsen et al disclose a method comprising:

- forming and aligning a capacitor stack including at least one anode stack (185) and at least one cathode stack (175);
- etching at least a portion of an inner surface of a capacitor case, the inner surface including an upper inner surface and a lower inner surface (figure 9);
- disposing the capacitor stack in the capacitor case (figure 9), and an at least one anode stack is adjacent the inner surface of the capacitor case; and
- disposing a separator (180) between the at least one anode and the inner surface of the case.

Regarding claim 9, Nielsen et al further comprising etching layers of the anode stack (column 10 lines 39-41).

Regarding claim 10, Nielsen et al further disclose a major surface of a second anode stack with the lower inner surface of the case (figure 9).

Regarding claim 11, Nielsen et al further disclose etching an entire inner surface of the case (figure 9).

Regarding claim 16, Nielsen et al disclose capacitor assembly comprising:

- at least one anode stack (185) including one or more anode conductive layers and an anode separator (180);
- at least one cathode stack (175) including one or more cathode conductive layers and a cathode separator (180);
- at least one separator (180) disposed between the anode stack and the cathode stack;
- each at least one anode stack stacked with the cathode stack to form a capacitor stack (256), and
- a capacitor case (90) sized to receive therein the capacitor stack, the capacitor case including a conductive surface, and one or more of the anode conductive layers electrically coupled with the conductive surface of the capacitor case (figure 9).

Regarding claim 17, Nielsen et al disclose the capacitor case comprises an etched capacitor case (figure 9).

Regarding claim 18, Nielsen et al further disclose a cathode feed-through coupled with at least one cathode stack, the cathode feedthrough extending through and is insulated from an opening of the case (column 25 lines 30-33).

Regarding claim 19, Nielsen et al disclose capacitor assembly as recited in claim 16, wherein one or more of the anode conductor layers includes an exposed edge coupled with the capacitor case (figure 9).

Regarding claim 20, Nielsen et al disclose one or more anode conductive layers

as shown in figure 9, as configured in figure 9.

Regarding claim 21, Nielsen et al further disclose a welded connection disposed between at least one of the one or more anode conductive layers and an inner surface of the case (column 25 lines 64-67 and column 26 lines 22-23).

Regarding claim 22, Nielsen et al further disclose an epoxied connection disposed between at least one of the one or more anode conductive layers and an inner surface of the case (figure 9).

Regarding claims 23&24, it is inherent that the aluminum electrolyte capacitor taught by Nielsen et al comprises at least 98% aluminum or 99.99% aluminum.

Regarding claim 25, Nielsen et al further disclose at least one edge clip coupled with each of the at least one anode stack, and the edge clip is electrically coupled with an inner surface of the case (figure 10).

Regarding claim 26, Nielsen et al disclose a capacitor assembly comprising:

- at least one anode stack (185) including one or more anode conductive layers and an anode separator (180);
- a capacitor case (90) sized to receive therein the anode stack, the capacitor case including a inner conductive surface; and
- means for electrically coupling the at least one anode stack with the inner conductive surface (figure 9).

Regarding claim 27, Nielsen et al disclose an electrically coupling comprises an elongated aluminum tab coupled to one of the at least one anode stacks (figure 10).

Regarding claim 28, Nielsen et al disclose a capacitor assembly comprising:



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- at least one anode stack (185) including one or more anode conductive layers and an anode separator (180), the one or more conductive layers including an exposed outer anode edge;
- at least one cathode stack (175) including one or more cathode conductive layers and a cathode separator;
- at least one separator (180) disposed between the anode stack and the cathode stack;
- each at least one anode stack stacked with the cathode stack to form a capacitor stack (figure 9);
- an etched capacitor case sized (90) to receive therein the capacitor stack, the capacitor case including a conductive surface, and the exposed outer anode (95) edge electrically coupled with the conductive surface of the capacitor case;
- a cathode feedthrough coupled (120) with at least one cathode stack, the cathode feedthrough extending through and is insulated from an opening of the case (figure 9); and
- each of the cathode conductive layers (175) is defined in part by a cathode edge surface, and each of the anode conductive layers (185) is defined in part by an anode edge surface, and the cathode edge surface is offset from the anode edge surface.

Regarding claim 29, it is inherent that the aluminum electrolyte capacitor taught by Nielsen et al comprises at least 99.99% aluminum.

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- stacking at least one anode stack (185) including one or more conductive anode layers and an anode separator;
- stacking at least one cathode stack (175) including one or more conductive cathode layers and a cathode separator;
- aligning and stacking the at least one anode stack and the at least one cathode stack to form a capacitor stack (figure 9);
- disposing the capacitor stack (265) within a capacitor case; and
- electrically coupling the anode stack with the capacitor case (figure 5).

Regarding claim 31, Nielsen et al further disclose etching an inner surface of the capacitor case (figure 9).

Regarding claim 32, Nielsen et al further disclose comprising etching the one or more conductive anode layers (figure 9).

Regarding claim 33, Nielsen et al further disclose welding the anode stack (210) with the capacitor case.

Regarding claim 34, Nielsen further comprising bonding the anode stacks with the capacitor case (figure 9).

Regarding claim 35, Nielsen further comprising coupling a cathode feedthrough (120) with the cathode stack, and disposing the cathode feedthrough through an opening of the capacitor case.

Regarding claim 36, Nielsen et al further comprising stacking the conductive cathode layer in an offset position from the anode conductive layer (figure 10).

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Regarding claim 37, Nielsen et al further comprising exposing outer edges of the one or more conductive anode layers (figure 9).

Regarding claim 38, Nielsen et al further comprising coupling the exposed outer edges with the capacitor case (figure 9).

Regarding claim 39, Nielsen et al further comprising welding the exposed outer edges with the capacitor case (figure 9).


### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nguyen T Ha whose telephone number is 703-308-6023. The examiner can normally be reached on Monday-Friday from 8:30AM to 6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on 703-308-3682. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3432 for regular communications and 703-305-3431 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

NH  
April 16, 2003

  
DEAN A. REICHARD  
SUPERVISORY PATENT EXAMINER